DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-010423 Address: 333 Burma Road **Date Inspected:** 17-Nov-2009

City: Oakland, CA 94607

Project Name: SAS Superstructure **OSM Arrival Time:** 645 **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Liu Fawen **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No

Yes No N/A **Delayed / Cancelled: Bridge No:** 34-0006 **Component:** Orthotropic Box Girder & TOWER Compone

Summary of Items Observed:

On this date Caltrans Office of Structural Materials Quality Assurance (QA) Inspector, Sandeep Kumar was present during the times noted above for observations relative to the work being performed.

BAY 1

This QA Inspector observed the following work in progress:

Flux Core Arc Welding:

This process welding of weld joint # 007 located on Counter Weight CW002A – PP084. Welder is identified as 054460. ZPMC QC is identified as Tian Lei. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2233 - B - L1a - F.

This process welding of weld joint # 007 located on Counter Weight CW002A – PP082. Welder is identified as 059450. ZPMC QC is identified as Tian Lei. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2233 - B - L1a - F.

BAY 2

This QA Inspector observed the following work in progress:

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Flux Core Arc Welding:

This process welding of weld joint # 127 located on Floor Beam FB3081 – 001. Welder is identified as 048433. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2231 - Tc - U4b - F.

This process welding of weld joint # 010 located on Longitudinal Diaphragm LD004–062. Welder is identified as 045203. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS -B - T - 2133.

This process welding of weld joint # 127 located on Floor Beam FB3054 – 001. Welder is identified as 045227. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2231 - Tc - U4b - F.

This process welding of weld joint # 093 located on Floor Beam FB3039 – 001. Welder is identified as 045209. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132 - 3.

BAY 5

The following NDT inspection carried out as per the ZPMC submitted Notification No. 004663 Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

1. SP202 – 011 – 12; 13; 14

2. SP205 - 011 - 12; 13; 14

This QA Inspector observed the following work in progress:

Flux Core Arc Welding:

This process welding of weld joint # 010 located on Traveler Rail 11TR1 – 029. Welder is identified as 217185. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2232 - Tc - U5 - F.

This process welding of weld joint # 013 located on Traveler Rail 10TR3 – 011. Welder is identified as 215078. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2232 - Tc - U5 - F.

This process welding of weld joint # 014 located on Traveler Rail 11TR3 – 023. Welder is identified as 215185. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2232 - Tc - U5 - F.

This process welding of weld joint # 014 located on Traveler Rail 11TR1 – 029. Welder is identified as 204342. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the

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WPS - B - T - 2232 - Tc - U5 - F.

BAY 6

The following NDT inspection carried out as per the ZPMC submitted Notification No. 004665 Visual Inspection Testing

This QA inspector performed VT of the area previously tested and accepted by ZPMC Quality Control personnel.

The members are identified as OBG Components. The identified component reviewed as follows:

Interior platform ladder – 2 SUITS

1. SA203

BAY 11

The following NDT inspection carried out as per the ZPMC submitted Notification No. 004662

Visual Inspection Testing

This QA inspector performed VT of the area previously tested and accepted by ZPMC Quality Control personnel.

The members are identified as OBG Components. The identified component reviewed as follows:

East tower lift 2 – Pad eyes to skin B

ESD1 - SA384A/D - 044; 045

East tower lift 2 – Manhole plate

ESD1 - SA300B/F - 014

Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

East tower lift 2 – Pad eyes to skin B

ESD1 – SA384A/D – 044; 045 – Green Tag # 10435R1

East tower lift 2 – Manhole plate

ESD1 - SA300B/F - 014

OUTSIDE YARD

The following NDT inspection carried out as per the ZPMC submitted Notification No. 004662

Visual Inspection Testing

This QA inspector performed VT of the area previously tested and accepted by ZPMC Quality Control personnel.

The members are identified as OBG Components. The identified component reviewed as follows:

1. $DP485 - 001 - 001 \sim 010$

2. $DP458 - 001 - 001 \sim 010$

Magnetic Particle Testing

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

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1.
$$DP485 - 001 - 001 \sim 010 - Green Tag # 009505$$

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No Relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang - 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer